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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,182	07/25/2006	Pascal Martin	1033818-000266	7269

21839 7590 06/04/2009  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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06/04/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,182	<b>Applicant(s)</b> MARTIN ET AL.	
	<b>Examiner</b> Geoffrey L. Knable	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/25/2006</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

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1. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 2-3, the method is described as being a "method in which a ...support is covered" - it however is not clear from the passive type language used here if this is actually requiring an active step of *covering* a support with elastomer or whether this is simply defining the structure of the support. Clarification is required. The other similar passive type language used throughout the method claim (e.g. "is presented", etc.) raises somewhat similar ambiguities in terms of assessing what actual active method steps are required by the claim.

In claim 1, line 4, reference is made to a "member conveying to the distributor" but it is not clear *what* is being "conveyed" - it even conceivably could be read at present as requiring that the member itself is what is conveyed. Clarification is required. An analogous ambiguity is presented at line 8 of claim 12.

In claims 2 and 22, it is not clear what defines a rotation axis "facing" the reception surface, the scope of this requirement being therefore indefinite and confusing. In other words, it is not clear what relative spatial relationship is required.

In claim 6, no antecedent has been established for "the blade".

In the last four lines of claim 12, a "space" is first defined as between the final tubular portion and the rotary distributor and then the "space" is referred to as "between the rotary distributor and the conveying member". To avoid any potential ambiguity in

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assessing whether this is referring to the same “space”, it is suggested that the same “final tubular portion of the” be added before conveying member.

In claim 15, line 2, it appears to be in error to define the “rotary distributor” as comprising the central tube, etc. since in the invention as described, the central tube is upstream of (and contiguous with) the “final tubular portion”, this final tube conveying to the distributor. It would appear that line 2 should refer to the “conveying member” rather than the “rotary distributor”.

In claim 15, line 4, given that additional tubes are defined earlier in the claim, it is suggested that “final” be inserted before “tubular portion” to clarify which portion is being referenced.

In claim 18, the reference numeral “63” should apparently be “62”.

In claim 19, no antecedent has been established for “the rotor”, it therefore not being clear what configuration is required by this claim as it is not clear what part of the claimed apparatus is the “rotor”.

In claim 21, line 6, no antecedent has been established for “the support”.

In claim 21, line 9, no antecedent has been established for “the core of the device” or “the said structure”.

In claim 21, line 10, it is also not clear if “said member” is referring to the conveying member defined in claim 12.

In claim 21, line 11, no antecedent has been established for “the central part of the device”.

In claim 22, line 1, the preamble "apparatus" does not agree with that of the claim from which it depends (claim 20 which refers to a "device"). Also, in claim 22, lines 2-3, no antecedent has been established for "the core". It appears that this claim may be intended to depend from claim 21.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5-7, 10-13, 15, 16, 18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Debroche et al. (US 4,952,259).

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Debroche et al. discloses a method of manufacturing a reinforcement comprising adjacent sections of reinforcement wire embedded in an elastomer matrix in which a reception surface on a support (1) is covered with the said elastomeric matrix; an assembly comprising a rotary distributor (e.g. 27 or 27/28) and a member (24) conveying to the distributor is presented in front of the reception surface of the support, the conveying member comprising a final tubular portion (24) substantially perpendicular to the rotation axis of the rotary distributor, the distributor comprising at least one deflector (27 and/or 28 - note that even part "28" is rotatable around axis 31), the deflector forming a corridor receiving the wire on the radially internal side and forming a guide at the exit from the deflector on the radially external side (e.g. "27" delimits a guide corridor for the wire; "28" likewise deflects and guides the wire), a space (after "241") being provided, in the radial direction, between the rotary distributor and the final tubular portion of the conveying member, the presentation being made so that the reception surface is close to the guidance path at the exit from the deflector when the rotary distributor is rotated, and so that the rotation axis of the rotary distributor (along "25" (or 31)) forms an angle perpendicular to the deposition angle required for the sections on the support; the rotary distributor is driven in rotation, at a controlled rotation speed (by "251"); the reception surface is made to travel with respect to the rotary distributor (by "12"); the wire is introduced, at a controlled linear speed, into the conveying member (by 230/231), threading it into the tubular portion; a knife (26) is made to act in the space between the tubular portion (24) and the distributor, so that the knife makes it possible to take off a section of wire, the said section being

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guided as far as and deposited on the reception surface by the said at least one deflector. A method as required by claim 1 is therefore anticipated.

As to claims 12 and 21, the above discussion with respect to claim 1 also shows that the corresponding device and apparatus is anticipated. As to claims 2 and 22, the rotation axis of the distributor is outside the core and therefore can also be described as broadly "facing" the tire core. As to claim 3, the tire is a surface of rotation. As to claims 5-6 and 13, the parts 24 and 27 (and 28) are rotary and coupled and the knife is immobile during cutting to cut a wire section and (with respect to claim 13), the knife is adjustable in angular position (col. 4, lines 37-41; which would imply a pivoting or rotary adjustment). As to claims 7 and 10, e.g. note col. 2, lines 61-66 and fig. 1. As to claim 11, the feed rollers 230/231 would have been understood as governing the length of cord/wire supplied. As to claim 15, note inlet orifice "240" of tube located on the rotation axis (esp. fig. 4). As to claims 16 and 18, note roller "27". As to claim 20, the central tube (beginning at "240") is within a rotary means (incorporating tube 24).

6. Claims 1-4, 6, 7, 10-12, 14, 16-18 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Debroche et al. (US 5,281,289).

Debroche et al. '289 discloses a method of manufacturing a reinforcement comprising adjacent sections of reinforcement wire embedded in an elastomer matrix in which a reception surface on a support (2) is covered with the said elastomeric matrix; an assembly comprising a rotary distributor (e.g. 30) and a member (82) conveying to the distributor is presented in front of the reception surface of the support, the conveying member comprising a final tubular portion substantially perpendicular to the rotation axis

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of the rotary distributor (note horizontal portion of tube "82" in fig. 5), the distributor comprising at least one deflector (302/300B and/or 97), the deflector forming a corridor receiving the wire on the radially internal side and forming a guide at the exit from the deflector on the radially external side, a space being provided, in the radial direction, between the rotary distributor and the final tubular portion (83) of the conveying member, the presentation being made so that the reception surface (2) is close to the guidance path at the exit from the deflector when the rotary distributor is rotated, and so that the rotation axis of the rotary distributor (39) forms an angle perpendicular to the deposition angle required for the sections on the support; the rotary distributor is driven in rotation, at a controlled rotation speed (by 14); the reception surface is made to travel with respect to the rotary distributor (around 21); the wire is introduced, at a controlled linear speed, into the conveying member (by 80/81), threading it into the tubular portion; a knife (84) is made to act in the space between the tubular portion (at 83) and the distributor, so that the knife makes it possible to take off a section of wire, the said section being guided as far as and deposited on the reception surface (2) by the said at least one deflector. A method as required by claim 1 is therefore anticipated.

As to claims 12 and 21, the above discussion with respect to claim 1 also applies and shows that the device and apparatus are likewise anticipated. As to claims 2 and 22, the rotation axis of the distributor is outside the core and therefore can also be described as broadly "facing" the tire core. As to claim 3, the core (2) is a surface of rotation. As to claims 4 and 14, note col. 7, lines 36-40. As to claim 6, the blade is coordinated with the turns of the distributor 30. As to claims 7 and 10, e.g. note col. 1,



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lines 45-47 and depicted core 2. As to claim 11, the feed rollers 80/81 would have been understood as governing the length of cord/wire supplied - note also col. 5, lines 65+.

As to claims 16-18, note roller 300B mounted to arm 30.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debroche et al. (US 5,281,289).

As to claims 8 and 9, Debroche et al. '289 only exemplifies the apparatus applying crown reinforcements but in describing the disadvantages of the prior art, it is suggested that the prior art apparatus does not make it possible "to produce a carcass ply in which the cord extends continuously from one bead of the tire to the other" (col. 1, lines 26-30). In view of this, and to thereby avoid the recited disadvantage of the prior art, it would have been obvious to adopt or adapt the described apparatus to form a carcass reinforcement which would be inclusive of reinforcement located in both the sidewalls and bead areas.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Debroche et al. (US 5,395,476) is another example of a rotary distributor (e.g. 5 or 50) feeding cut cords to a surface but is at present no more relevant than the applied prior art.

Klein (US 3,674,584) discloses a device for applying cords to a surface including a rotary distributor (part "30" rotates around part 49) but is at present no more relevant than the applied prior art.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/  
Primary Examiner, Art Unit 1791

G. Knable  
May 30, 2009